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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/814,428	04/01/2004	Luc Gourlaouen	05725.1315-00	5713
22852	7590	12/06/2007		
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EXAMINER				
FRAZIER, BARBARA S				
ART UNIT		PAPER NUMBER		
4173				
MAIL DATE		DELIVERY MODE		
12/06/2007		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/814,428

**Applicant(s)**

GOURLAOUEN ET AL.

**Examiner**

Barbara Frazier

**Art Unit**

4173

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-69 is/are pending in the application.
- 4a) Of the above claim(s) 14-21, 24-29 and 31-65 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7, 9-13, 22, 23, 30 and 66-69 is/are rejected.
- 7) ☒ Claim(s) 8 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 6/8/06 and 2/26/07.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Election/Restrictions*

1. Applicant's election of Group I, claims 1-46 and 66-69 in the reply filed on 11/15/07 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. Claims 47-65 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 11/15/07.
3. Applicant's election of the species of the composition comprising a fluorescent dye and an aminosilicone, with dyes of formula (F3) as the fluorescent dye species and compounds of formula (A) as the aminosilicone species, in the reply filed on 11/15/07 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
4. Claims 14-21, 24-29, and 31-46 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 11/15/07.
5. Claims 1-13, 22, 23, 30, and 66-69 are examined.

6. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 5 and 67 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 5 and 67 are vague and indefinite in that the metes and bounds of the term “type” are unclear. The term is unclear because exactly what compounds are encompassed by the term “type” is subjective, where more than one meaning is possible. For example, “methine type” could be compounds having just a methylene group, or compounds having an alkylene bridge. Furthermore, the definition of the term “type” is not found in Applicant’s specification.

For purposes of examination, the term “type” will be interpreted to include any type of dye within the classes mentioned in the claims.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1-7, 9-13, 22, 23, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luo et al., WO 99/13846, in view of Degen et al., 4,256,458.

The claimed invention is drawn to a cosmetic composition comprising at least one fluorescent dye and at least one aminosilicone (see claim 1), specifically, where the fluorescent dye is of the formula (F3) (claim 6) and the aminosilicone is of the formula (A) (see claim 12).

Luo et al. disclose hair care compositions comprising an effective amount of an optical brightener and a silicone compound; further disclosed are shampoo compositions that also contain a detergents surfactant (see abstract). Luo et al. state that optical brighteners are also named fluorescent dyes (page 1, line 35 – page 2, line 1). The silicone compound that is especially preferred is an amino substituted silicone of the formula (IV) (page 20, lines 5-20); this compound is encompassed by Applicant's aminosilicone compound of formula (A). Luo et al. differ from the claimed invention because the fluorescent dye used is not of the formula (F3). However, Degen et al. disclose methine dyes which correspond to the formula (F3); specific examples are found in Examples 1-10, columns 8-17. Degen et al. teach that the methine dyes disclosed may be used on paper or on anionically-modified fibers (see Title and col. 6, lines 55-57).

A person having ordinary skill in the art would have motivated to use the dyes of Degen et al. in the composition of Luo et al., since both references are drawn to dyeing processes involving anionically modified fibers. The hair fibers to which the compositions of Luo et al. are applied would have been "anionically modified" because the presence of the detergents surfactant in the shampoo composition would have anionically modified the surface of the hair fibers, since the surfactant(s) used carry an anionic charge (see Examples 1-25, pages 51-56 of Luo et al.). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the

invention was made to use the dyes of Degen et al. in the composition of Luo et al. in order to arrive at the claimed invention, with a reasonable expectation of success.

With respect to Applicant's arguments that "[A] fluorescent dye as disclosed herein can be differentiated from an optical brightener" (page 5, paragraph), it is noted that Applicant's claims are not limited to fluorescent dyes which are also not optical brighteners. Furthermore, while the optical brighteners of Luo et al. absorb light in the range of about 200 nm and about 420 nm, they **emit** light in the range of about 400 nm and about 780 nm, and also may have minor absorption peaks in the visible range between a wavelength of about 360 nm and about 830 nm (see page 3, lines 8-21 of Luo et al.). These ranges overlap the ranges of the claimed invention of about 500 nm to about 650 nm, or about 550 nm to about 620 nm (see claims 3 and 4), and one skilled in the art would be able to optimize such ranges as a matter of routine experimentation.

Regarding the fluorescent dye being in the orange range (claim 2), it is noted that Examples 2-5 of Degen et al. (columns 8-12) produce dyes that are in the orange range.

Regarding the type of fluorescent dye (claim 5), it is noted that the dyes of Degen et al. are methine dyes (see Title).

Regarding the definition of substituents on the compounds of formula (F3) (claims 6 and 7), it is noted that the compounds of Examples 1-10 of Degen et al. have substituents which are encompassed by the definition for the substituents found in claims 6 and 7.

Regarding the amount of fluorescent dye present (claims 9-11), Luo et al. teach that the amount of optical brightener used is from about 0.001% to about 20%, more preferably from about 0.01% to about 10% (page 3, lines 34-36). This appears to be comparable to the amounts

claimed by Applicants, especially given that the prior art uses the flexible modifier “about”. In any case, it would have been obvious to determine workable and/or optimal amounts of fluorescent dye per the reasoning of well-established precedent, such as In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955). (Holding that “[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation.” )

Regarding the amount of aminosilicone present (claims 22 and 23), Luo et al. teach that the silicone compound is preferably at a level of from about 0.01% to about 15%. This appears to be comparable to the amounts claimed by Applicants, especially given that the prior art uses the flexible modifier “about”. In any case, it would have been obvious to determine workable and/or optimal amounts of aminosilicone per the reasoning of well-established precedent, such as In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955). (Holding that “[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation.” )

Regarding the composition being in the form a of a lightening dyeing shampoo (claim 30), it is noted that the compositions of Luo et al. may be a shampoo (abstract) which alter the color of the hair by emitting light in the visible range (page 3, lines 22-24).

7. Claims 66-69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luo et al. and Degen et al. as applied to claims 1-7, 9-13, 22, 23, and 30 above, and further in view of Genet et al., US Patent 6,451,068.



The claimed invention and the inventions of Luo et al. and Degen et al. are described above (see paragraph 6). Luo et al. and Degen et al. differ from the claimed invention because they do not specifically state that the fluorescent dye and aminosilicone are in a multi-compartment kit with an oxidizing agent in a second compartment. However, Luo et al. do teach that other components, including oxidizing agents, may be formulated with the composition (see page 50, lines 8-9 and 19-21). Furthermore, it is well known to a person having ordinary skill in the art to have a multi-compartment kit with a dye in one compartment and an oxidizing agent in another compartment. As evidence, Genet et al. disclose a multi-compartment kit with a methine-type dye in one compartment and an oxidizing agent in another compartment (see claim 54). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have a multi-compartment kit with the composition of Luo et al. and Degen et al. (as described above, in paragraph 6) in one compartment and an oxidizing agent in the other compartment, with a reasonable expectation of success.

***Allowable Subject Matter***

8. Claim 8 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barbara Frazier whose telephone number is (571)270-3496. The examiner can normally be reached on Monday-Thursday 8am-4pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ardin Marschel can be reached on (571)272-0718, or Cecilia Tsang can be reached on (571)272-0562. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BSF

/Ardin Marschel/  
Supervisory Patent Examiner, Art Unit 1614